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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/579,046

05/09/2006

Minerva M. Yeung

42P17841

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09/03/2009

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EXAMINER

STONE, ROBERT M

ART UNIT

PAPER NUMBER

2629

MAIL DATE

DELIVERY MODE

09/03/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/579,046	Applicant(s) YEUNG ET AL.	
	Examiner Robert M. Stone	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 April 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The amendment filed on 13 April 2009 has been entered and considered by the examiner.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3, 5–7, 9, 11–13 and 15–18 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Ohara* (US 5,739,814) in view of *Curry* (US 6,055,552).

As to **claim 1**, *Ohara* (col. 2 Ln. 53 to col.3 Ln. 24) discloses a method of associating a selected object on any pre-existing printed material (pre-existing printed sheets in the books [col. 4, lines 54-55 and col. 6, lines 64-65]) to a valid response (activating video and sound via touch [col. 5, lines 31-33]) provided by a computer system comprising;

determining a position of an electronic pen (tethered pen; Figs. 5 and 9, part 24) on a page of the pre-existing printed material (col. 3 Ln. 14 – 31 & col. 4. Ln. 17-31; fig. 1 & fig. 9);

transmitting the position to the computer system (col. 3 Ln. 14 – 31 & col. 4. Ln. 63 - 68; fig. 2);

correlating the position to selected content associated with the printed material, the selected content being accessible by the computer system; (col. 6 Ln. 46 – 49 & col. 4 Ln. 17 – 31; fig. 1 & 9)

and providing a valid response to a user based at least in part on the position and the correlated content, wherein the valid response includes at least one of rendering audio content, rendering video content, rendering image content, rendering text content, and performing an action by the computer system. (col. 6 Ln. 46 – 49 & col. 5 Ln. 27 – 59; fig. 1 & 9).

Ohara does not expressly disclose wherein the pre-existing printed material has not been modified for use with the computer system and the electronic pen.

Curry discloses a pen input system (Figs. 1 and 9-11) having pre-existing printed material (sheets of paper 14 in Figs. 1 and 10 that lay on top of the clipboard are pre-existing blank paper or preprinted documents having data entry fields [col. 5, lines 55-56]) that has not been modified for use with the computer system and the electronic pen (the flexibility of the system provides use with any document or paper since a duplicate is made of the documents being written on so there is no need for the paper/documents to be specially modified for the system [col. 1, lines 50-53; col. 3, lines 21-23; col. 5, lines 55-56]).

At the time of invention, it would have been obvious for a person of ordinary skill in the art to have provided for the use of pre-existing printed material that has not been modified for use with the computer system and pen as

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taught by *Curry* in the touch device of *Ohara*. The suggestion/motivation would have been to provide a data entry device that can be used to concurrently process multiple forms [col. 2, lines 36-38] while maintaining changes between pages and providing a digital record of pen inputs [col. 2, lines 55-57].

As to **claim 7**, *Ohara* (col. 2 Ln. 53 to col.3 Ln. 24) discloses an article comprising: a storage medium having a plurality of machine accessible instructions, (col. 4 Ln. 26; fig. 1)

wherein when the instructions are executed by a processor, the instructions provide for associating a selected object on any pre-existing printed material (pre-existing printed sheets in the books [col. 4, lines 54-55 and col. 6, lines 64-65]) to a valid response (activating video and sound via touch [col. 5, lines 31-33]) provided by a computer system (col. 3 Ln. 14 – 31 & col. 4 Ln. 26-29; fig. 1) by

determining a position of an electronic pen (tethered pen; Figs. 5 and 9, part 24) on a page of the pre-existing printed material (pre-existing printed sheets in the books [col. 4, lines 54-55 and col. 6, lines 64-65] wherein position is determined [col. 3 Ln. 14 – 31 & col. 4. Ln. 17-31; fig. 1 & fig. 9]);

transmitting the position to the computer system (col. 3 Ln. 14 – 31 & col. 4. Ln. 63 - 68; fig. 2);

correlating the position to selected content associated with the printed material, the selected content being accessible by the computer system (col. 6 Ln. 46 – 49 & col. 4 Ln. 17 – 31; fig. 1 & 9);

and providing a valid response to a user based at least in part on the position and the correlated content, wherein the valid response includes at least one of rendering audio content, rendering video content, rendering image content, rendering text content, and performing an action by the computer system (col. 6 Ln. 46 – 49 & col. 5 Ln. 27 – 59; fig. 1 & 9).

Ohara does not expressly disclose wherein the pre-existing printed material has not been modified for use with the computer system and the electronic pen.

Curry discloses a pen input system (Figs. 1 and 9-11) having pre-existing printed material (sheets of paper 14 in Figs. 1 and 10 that lay on top of the clipboard are pre-existing blank paper or preprinted documents having data entry fields [col. 5, lines 55-56]) that has not been modified for use with the computer system and the electronic pen (the flexibility of the system provides use with any document or paper since a duplicate is made of the documents being written on so there is no need for the paper/documents to be specially modified for the system [col. 1, lines 50-53; col. 3, lines 21-23; col. 5, lines 55-56]).

At the time of invention, it would have been obvious for a person of ordinary skill in the art to have provided for the use of pre-existing printed material that has not been modified for use with the computer system and pen as taught by *Curry* in the touch device of *Ohara*. The suggestion/motivation would have been to provide a data entry device that can be used to concurrently

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process multiple forms [col. 2, lines 36-38] while maintaining changes between pages and providing a digital record of pen inputs [col. 2, lines 55-57].

As to **claim 12**, *Ohara* (col. 2 Ln. 53 to col.3 Ln. 24) discloses a system for associating a selected object on any pre-existing printed material (pre-existing printed sheets in the books [col. 4, lines 54-55 and col. 6, lines 64-65]) to a valid response (activating video and sound via touch [col. 5, lines 31-33]) provided by a computer system comprising:

a pointing device (tethered pen; Figs. 5 and 9, part 24) to determine a position on the pre-existing printed material (pre-existing printed sheets in the books [col. 4, lines 54-55 and col. 6, lines 64-65]);

a communicating device to transmit the position to the computer system (col. 3 Ln. 14 – 31 & col. 4. Ln. 63 - 68; fig. 1 & 2, item 6);

a player component to correlate the position to selected content associated with the printed material, the selected content being accessible by the computer system (col. 6 Ln. 46 – 49 & col. 4 Ln. 17 – 31; fig. 1 & 9 item 18);

and to provide a valid response to a user based at least in part on the position and the correlated content, (col. 6 Ln. 46 – 49 & col. 5 Ln. 27 – 59; fig. 1 & 9)

wherein the valid response includes at least one of rendering audio content, rendering video content, rendering image content, rendering text content, and performing an action by the computer system. (Col. 5 Ln. 27 -65)

Ohara does not expressly disclose wherein the pre-existing printed material has not been modified for use with the computer system and the electronic pen.

Curry discloses a pen input system (Figs. 1 and 9-11) having pre-existing printed material (sheets of paper 14 in Figs. 1 and 10 that lay on top of the clipboard are pre-existing blank paper or preprinted documents having data entry fields [col. 5, lines 55-56]) that has not been modified for use with the computer system and the electronic pen (the flexibility of the system provides use with any document or paper since a duplicate is made of the documents being written on so there is no need for the paper/documents to be specially modified for the system [col. 1, lines 50-53; col. 3, lines 21-23; col. 5, lines 55-56]).

At the time of invention, it would have been obvious for a person of ordinary skill in the art to have provided for the use of pre-existing printed material that has not been modified for use with the computer system and pen as taught by *Curry* in the touch device of *Ohara*. The suggestion/motivation would have been to provide a data entry device that can be used to concurrently process multiple forms [col. 2, lines 36-38] while maintaining changes between pages and providing a digital record of pen inputs [col. 2, lines 55-57].

As to **claim 3**, wherein correlating the position comprises searching a printed material database, the printed material database comprising positional information of objects on the pages (col. 3 Ln. 14 -39 & col. 4 Ln. 26 – 29; fig. 1)

As to **claim 5**, wherein performing the action comprises at least one of

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adjusting volume of a speaker, adjusting brightness of a computer monitor, sending commands to an input/output (I/O) port, and powering off the computer system. (col. 5 Ln. 17 – 25 & col. 5 Ln. 27 – 45; fig. 3) – I/O port is the terminal (Item 12) to retrieve and load information from the book to the computer, and vice-versa.

As to **claim 6**, wherein the pre-existing printed material (pre-existing printed sheets in the books [col. 4, lines 54-55 and col. 6, lines 64-65]) comprises a traditional paper book. (col. 6 -61 – col. 7 Ln. 10; fig. 7 - 8) As to **claim 9**, wherein instructions for correlating the position comprise instructions for searching a printed material database, the printed material database comprising positional information of objects on the pages. (col. 3 Ln. 14 -39 & col. 4 Ln. 26 – 29; fig. 1)

As to **claim 11**, wherein the action comprises at least one of adjusting volume of a speaker, adjusting brightness of a computer monitor, sending commands to an input/output (I/O) port, and powering off the computer system. (col. 5 Ln. 17 – 25 & col. 5 Ln. 27 – 45; fig. 3) – I/O port is the terminal (Item 12) to retrieve and load information from the book to the computer, and vice-versa.

As to **claim 13**, wherein the pointing device comprises an electronic pen. (fig. 5 & 9, item 24)

As to **claim 14**, further comprising a holder structure to hold the pre-existing printed material in a fixed relationship to the pointing device (indented storage space on lid member 55 holds the book 6 of pre-existing printed material

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while the binding holds the pages of pre-existing printed material to the book [col. 8, lines 26-28]).

As to **claim 15**, further comprising a multimedia database to store digital multimedia content, (col. 2 Ln. 53 to col.3 Ln. 24; fig. 9) a printed material content database to store positional information about objects on the pages and linkage information between the objects and at least one of the multimedia contents and actions, and an action library to store directives for actions to be performed on the system. (col. 5 Ln. 27 -65, fig.3)

As to **claim 16**, wherein the pre-existing printed material (pre-existing printed sheets in the books [col. 4, lines 54-55 and col. 6, lines 64-65]) comprises a traditional paper book (col. 6 -61 – col. 7 Ln. 10; fig. 7 - 8).

As to **claim 18**, wherein the action comprises at least one of adjusting volume of a speaker, adjusting brightness of a computer monitor, sending commands to an input/output (I/O) port, and powering off the computer system. (col. 5 Ln. 17 – 25 & col. 5 Ln. 27 – 45; fig. 3) – I/O port is the terminal (Item 12) to retrieve and load information from the book to the computer, and vice-versa.

4. Claims 2 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Ohara* (US 5,739,814) in view of *Curry* (US 6,055,552) and *Wood* (US 6,414,673).

Ohara discloses a pre-existing printed material (pre-existing printed sheets in the books [col. 4, lines 54-55 and col. 6, lines 64-65]) on a book situated near an electronic pen (col. 7. line 52 - 61 fig. 9).

Ohara in view of *Curry* does not expressly disclose determining position using ultrasound signal timing information.

Wood discloses a method for ultrasound signal timing information along with ultrasound sensors near a moving pen on a material being printed (Col. 13 Ln. 14 – 22; Figs. 9 & 17).

At the time of invention, it would have been obvious for a person of ordinary skill in the art to have used ultrasound for position detection as taught by *Wood* in the touch system of *Ohara* as modified by *Curry*. The suggestion/motivation would have been to increase accuracy for the position of the moving pen and also to provide “a means for communicating supplementary information between a transmitter pen and external receivers...” [col. 2 Ln. 59 – 63].

5. Claims 4, 10, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Ohara* (US 5,739,814) in view of *Curry* (US 6,055,552) and *Amano* (US 2004/0119696).

Ohara discloses an electronic book which is used in devices for entertainment, learning, and others with selectable features on the screen (col. 2. line 30 -42; fig. 3 & 9).

Ohara in view of *Curry* does not expressly disclose a language selection feature to be used for subsequent responses.

Amano discloses a language selection feature use for responses for the input of the user on figs. 13 & 14 ([0048 – 0052]).

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At the time of invention, it would have been obvious for one of ordinary skill in the art to have provided a language selection as taught by *Amano* in the touch system of *Ohara* as modified by *Curry*. The suggestion/motivation would have been to improve the learning experience of all users with a different cultural/lingual background.

Response to Arguments

6. Applicant's arguments with respect to claims 1-18 have been considered but are moot in view of the new ground(s) of rejection as necessitated by the amended limitations.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- a. *Flickinger* (US 5,629,499) teaches a pen input system with a clipboard that holds pre-existing paper to be written on with a pen while recording what is written.
- b. *Norwood* (US 5,063,600) teaches writing on ordinary paper while digitally duplicating what is written with the stylus.
- c. *Epperson* (US 5,247,137) teaches a digital recording pen that records what is written by the user regardless of the medium on which is it being used.

- d. *Crooks* (US 5,587,560) teaches the use of a stylus to write on a pre-existing printed material with designated input areas recorded by the computer.
 - e. *Jeng* (US 4,809,246) teaches a printed book with sound illustrations.
 - f. *DeSmet* (US 4,884,974) teaches a pre-printed talking interactive book.
 - g. *Song* (US 6,763,995) teaches a system for illustrating text of a book through sound.
8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).
- A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.
- Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert M. Stone whose telephone number is (571)270-5310. The examiner can normally be reached on Monday-Friday 9 A.M. - 4:30 P.M. E.S.T. (alternate Fridays off).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chanh D. Nguyen can be reached on (571)272-7772. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Robert M Stone/
Examiner, Art Unit 2629

/Chanh Nguyen/
Supervisory Patent Examiner, Art
Unit 2629